United States
Environmental Protection
Agency

Office of Public Affairs
Region 5
230 South Dearborn Street
Chicago, Illinois 60604

Illinois Indiana
Michigan Minnesota
Ohio Wisconsin

U.S. EPA Proposes Cleanup Action

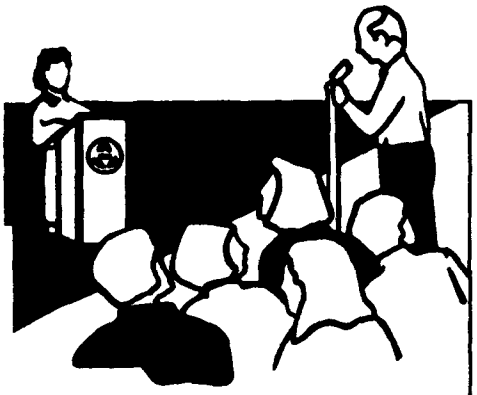
NL/Taracorp Superfund Site

Granite City, Illinois

January 1990

This fact sheet will explain ...

- U.S. EPA's proposed cleanup plan for the NL/Taracorp Superfund site
- Other cleanup choices considered by U.S. EPA
- How you can participate in choosing the final site cleanup plan



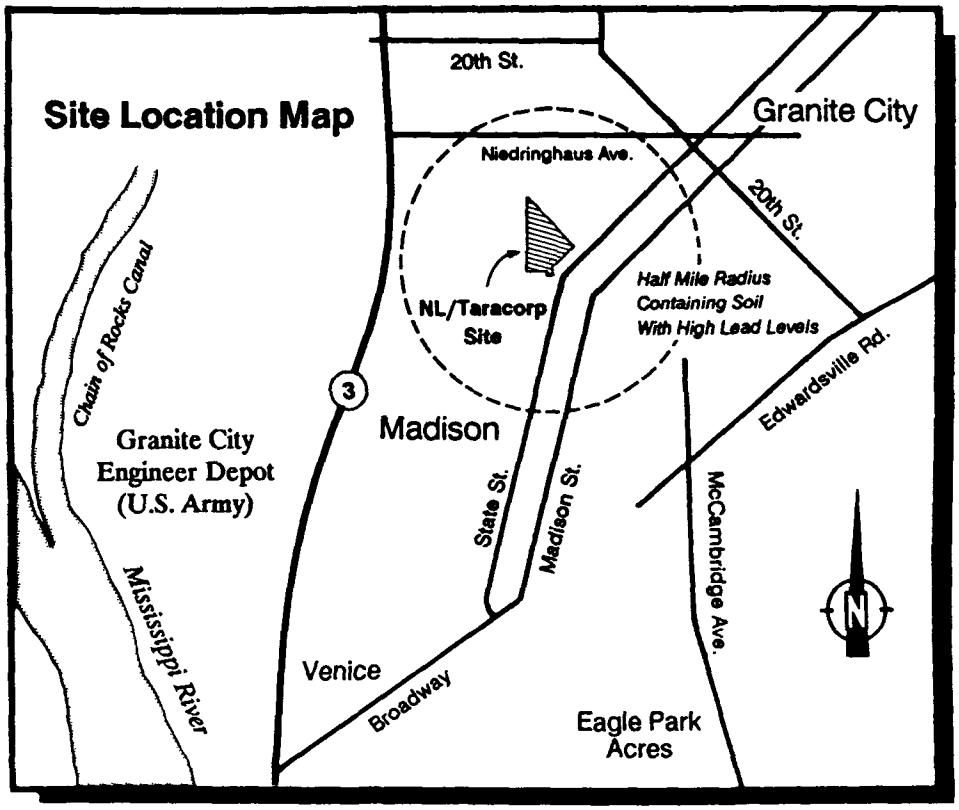
Public Participation

U.S. EPA will hold a public meeting to explain the results of the cleanup study and to accept comments on the cleanup choices:

DATE: **February 8, 1990**

TIME: **7:00 p.m.**

PLACE: **Township Hall**
2060 Delmar Ave.
Granite City, Illinois



The United States Environmental Protection Agency (U.S. EPA) has proposed several actions to correct lead contamination problems at the NL/Taracorp Superfund site in Granite City, Illinois. These actions include taking away drums of lead materials from the site; properly disposing of lead contaminated materials and soils found at and near the site, including soils in some residential areas; and testing air and ground-water quality. These actions are summarized in a document called the Proposed Plan. The actions are described in more detail in the Feasibility Study Report (FS Report) and Addendum.

U.S. EPA's proposed plan for cleaning up the NL/Taracorp site is based on studying several cleanup choices. This study is called a feasibility study (FS). It was done by NL Industries, a former owner of the site. NL Industries is believed to be among the parties responsible for the lead contamination found at and near the site. U.S. EPA and Illinois EPA (IEPA) supervised the study.

U.S. EPA wants your comments on the proposed plan and the feasibility study. A public comment period is being held from January 10 to February 24, 1990. During this time, you are encouraged to read the site documents and send written comments to U.S. EPA. In addition, you can give your comments to U.S. EPA during a public meeting on February 8, 1990. Site documents are available at the Granite City Public Library, 2001 Delmar Avenue, Granite City, Illinois.

Site History

The NL/Taracorp Superfund site occupies almost 16 acres at 16th Street and Cleveland Boulevard in Granite City. The site has been used for operations related to metal processing since 1903 when it was opened by Hoyt Metal. The company was sold and renamed United Lead. NL Industries bought United Lead in 1928 and operated the facility until 1979 when it was bought by Taracorp Inc. Taracorp makes metal products at the site.

IEPA began testing air quality for lead in 1978. Most (85 percent) of the air samples tested from Granite City between 1978 and 1981 had lead levels higher than levels the federal government considers safe.

IEPA investigated the Taracorp plant in 1982 and found that site operations were causing the area's lead problems. After this, IEPA denied Taracorp's application to continue making lead products at the plant. Taracorp Inc. filed for bankruptcy in December 1982. In 1986, U.S. EPA included the NL/Taracorp site on its list of sites that have serious hazardous waste problems. The list is called the Superfund National Priorities List. Sites on this list are studied and cleaned up by U.S. EPA or companies responsible for the waste problems.

In 1985, NL Industries signed a legal agreement to study the hazardous waste problems at and near the site, and look at ways to correct the problems. The study, called a remedial investigation and feasibility study (RI/FS), began in January 1987 and ended in November 1988.

The investigation found that possible health risks from the NL/Taracorp site mostly come from direct contact with contaminated soils and materials, and from breathing contaminated dust.

A federal health agency recommends that "In general, lead in soil and dust appears to be responsible for higher blood lead levels in children when the concentration in soil or dust is at levels higher than 500 to 1,000 ppm." U.S. EPA uses this recommendation to evaluate the health risks from lead.

Touching or holding soil contaminated with lead is an example of direct contact. You can breathe contaminated dust if it is blowing around on a windy day.

The study found several areas at and near the NL/Taracorp site where lead contamination may be a health threat to the community. These areas include:

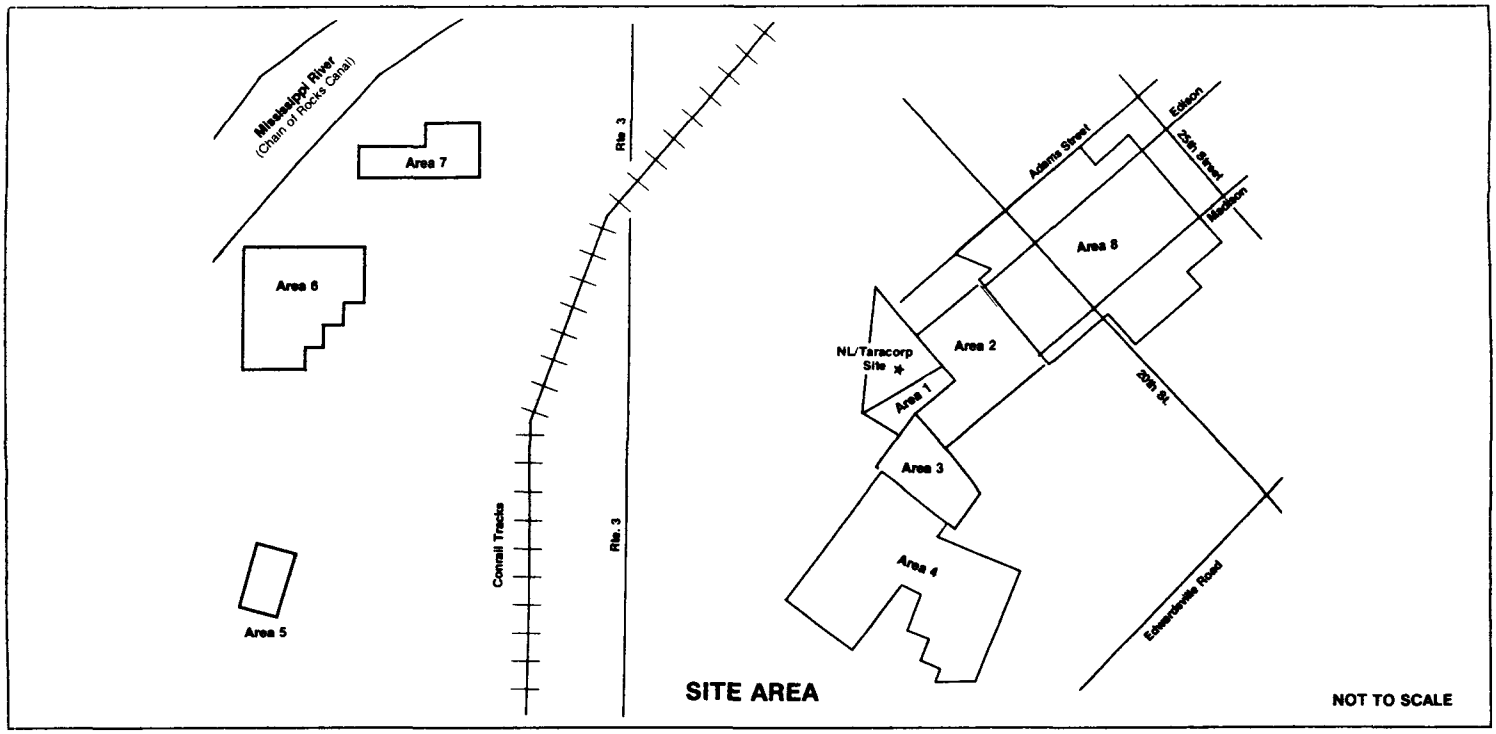
The Taracorp Pile: A large waste pile located on the NL/Taracorp site filled with lead wastes. About 25 to 35 drums containing lead wastes were found on the surface of the waste pile. The NL/Taracorp site is shown on the map below.

Area 1: This area is located next to the NL/Taracorp site. The property contains unpaved areas and a waste pile used by a company called St. Louis Lead Recyclers (SLLR pile). The SLLR pile contains materials from battery cases. The unpaved areas are contaminated with high lead levels. This area is shown near the NL/Taracorp site on the map below.

Residential areas (Areas 2 through 8): These are areas near the site that are mostly residential. Soils tested from these areas contained lead levels that could be a health threat to the community. The areas closest to the site have the highest levels of lead contamination. These areas are shown on the map below as Areas 2 through 8.

Eagle Park Acres: This area includes some residential land near the site. Battery case materials containing lead were used to fill a ditch on the property. The area was later dug up. This exposed the contaminated battery case materials. Lead levels are different throughout the area, from 63 to 3,280 parts per million (ppm). A part per million is a unit used to measure the concentration of a substance or chemical, like lead. One part per million, or ppm, would be equal to one second in eleven days.

Venice Township Alleys: Battery case materials were allegedly used to pave and/or fill some alleys in Venice Township. Tests done on the alleys showed a wide range of lead contamination, from 220 ppm to 126,000 ppm.



Feasibility Study

The feasibility study is the part of the study that looks at possible solutions for cleaning up Superfund sites. Each possible solution is weighed based on site conditions, how well it will work (effectiveness), and cost.

Some cleanup solutions, or alternatives, are dropped right away. However, that still leaves several alternatives. U.S. EPA looks at the remaining alternatives closely, based on nine factors, or criteria. The cleanup action finally chosen must satisfy all nine of these criteria. The nine criteria ask the following questions:

- **Will the cleanup alternative reduce the health threat from the site?**
- **Will the cleanup alternative comply with the law?**
- **How long will it protect the community?**
- **Does the cleanup alternative solve the contamination problems?**
- **How quickly will the problems be solved?**
- **Can the cleanup alternative be put into place easily?**
- **How much will it cost?**
- **What does the State of Illinois think?**
- **What does the community think?**

The nine criteria are explained in more detail on page 6. For the NL/Taracorp site, eight alternatives (Alternatives A through H) were looked at.

All alternatives include restricting access to the NL/Taracorp property (for example by placing a fence around the property), restricting the sale and use of the property, and testing air and ground water. At least four wells would be installed to help U.S. EPA test water quality in the lower part of an aquifer located underneath the site. An aquifer is a layer of rock, sand and gravel underneath the ground surface that is able to store water. When there is enough good quality water in an aquifer, it can be used for drinking or other purposes. The water found in an aquifer is called ground water.

Based on the U.S. EPA's study, ground-water contamination does not appear to be a health or environmental threat. However, ground water in the lower portion of the aquifer was not tested during the study. The proposed testing will identify any ground-water contamination that may threaten public health or the environment in the future. If any problems are found, U.S. EPA will develop plans to correct them.

The cleanup alternatives listed are different in the way they suggest cleaning up the contamination. Six of the alternatives require removing and disposing of contaminated materials. These six alternatives are different in the **way** the materials would be disposed and in the **amount** of contaminated materials that would be disposed. The eight alternatives are shown on the next two pages.

Get Involved!

U.S. EPA wants your input on the proposed cleanup alternative and the other cleanup choices discussed in the feasibility study. Comments given by residents and other interested parties are valuable in helping U.S. EPA select a final remedy for the site. Based on new information or public comment, U.S. EPA, along with IEPA, may change the preferred alternative or choose another alternative.

There are two ways for you to give your opinion during the public comment period:

1. You may send written comments to MaryAnn Croce LaFaire, U.S. EPA's Community Relations Coordinator for the NL/Taracorp site. Her address is:

   U.S. EPA (5PA-14)
   230 South Dearborn Street
   Chicago, IL 60604

   Comments must be postmarked by February 24, 1990.

2. You may tell your comments to U.S. EPA during the public meeting on February 8 at 7:00 p.m. at the Township Hall, 2060 Delmar Avenue, Granite City, Illinois. A court reporter will be present to record comments for the written record.

   After the public comment period is over, U.S. EPA will review and consider the submitted comments when making a final decision for the site. The final actions chosen for the site may, therefore, be different than the preferred alternatives in the Proposed Plan.

   U.S. EPA will respond to all comments in a document called a responsiveness summary. The responsiveness summary will be attached to the Record of Decision (ROD) for the site which will be made available to the public. You are encouraged to review the Proposed Plan, Feasibility Study Report and addenda, and other documents related to the site. All documents are available at the Granite City Public Library, 2001 Delmar Avenue.

   If you have any questions about the NL/Taracorp site comment period, please contact MaryAnn Croce LaFaire at U.S. EPA's toll-free number: 1-800-572-2515.

SUMMARY OF CLEANUP ALTERNATIVES

Alternative A: No Action

- Install wells to test ground-water quality
- Test air and ground-water quality
- Restrict site access and use

The Superfund program requires that a "no action" alternative be considered at every site. The no action cleanup alternative is compared to the other alternatives. This alternative calls for only testing and site restrictions. This alternative would not protect human health and the environment.

Total Cost: $475,110
Implementation Time: 6-12 months

Alternative B

- Take the drums of lead waste away from the Taracorp pile to recover lead materials that can be recycled
- Dig up wastes from the SLLR pile and place with Taracorp pile
- Cover Taracorp pile with a multilayered cap
- Cover dug-up surfaces in Venice alleys with asphalt or sod
- Place a clay cap over battery case material in Eagle Park Acres; plant grass on cap
- Cover dug-up surfaces in the three areas closest to the site (Areas 1, 2, 3) with asphalt or sod
- Install wells to test ground-water quality
- Test air and ground-water quality
- Restrict site access and use

In this alternative, no action would be taken in five of the residential areas (Areas 4 through 8). Because action would not be taken in all of the areas, U.S. EPA feels that this alternative would not adequately protect human health.

Total Cost: $5,685,020
Implementation Time: 1-2 years

Alternative C was nearly identical to Alternative D, and was, therefore, excluded from detailed evaluation.

Alternative D

- Take the drums of lead waste away from the Taracorp pile to recover lead materials that can be recycled
- Dig up SLLR pile and place with Taracorp pile
- Dig up battery case material from Venice alleys and Eagle Park Acres and place with Taracorp pile
- Dig up contaminated soils from the three areas closest to the NL/Taracorp site (Areas 1, 2 and 3) and place with Taracorp pile
- Cap Taracorp pile as in Alternative B
- Cover dug-up areas with sod or asphalt
- Install wells to test ground-water quality
- Test air and ground-water quality
- Restrict site access and use

This alternative would remove more contaminated materials than Alternative B. However, it would not address contaminated soils in five of the residential areas. Therefore, it would not protect human health as well as alternatives that do address these areas.

Total Cost: $6,835,450
Implementation Time: 1-2 years

Alternative E

- Take the drums of lead waste away from the Taracorp pile to recover lead materials that can be recycled
- Construct a liner system next to the Taracorp pile that would not allow water to seep through
- Dig up wastes from the Taracorp and SLLR piles, Venice alleys, Eagle Park Acres, and place them in the liner system
- Dig up soils from the area next to the NL/Taracorp site (Area 1) with lead levels greater than 1000 ppm and soils in residential areas (Areas 2 through 8) with lead levels greater than 500 ppm, and place in the liner system
- Cap Taracorp pile as in Alternative B
- Cover dug-up areas with asphalt or sod
- Install wells to test ground-water quality
- Test air and ground water quality
- Restrict site access and use

This alternative involves installing a bottom liner system next to the Taracorp pile which would not let water through. The liner system would consist of clay, sand, and a synthetic fabric. The purpose of the liner system would be to prevent lead from moving through the waste pile and into the ground-water system below the site. Of all the alternatives looked at, this alternative would reduce contaminant movement the most. However, the amount of digging required could expose the community to contaminated dust. Dust control measures would be required.

Total Cost: $31,000,000
Implementation Time: 3-4 years

Alternative F

- Take the drums of lead waste away from the Taracorp pile to recover lead materials that can be recycled
- Construct a liner system next to the Taracorp pile that would not allow water to seep through
- Dig up Taracorp pile and lead wastes to recover recyclable lead and battery case materials
- Take the recyclable material away from the Taracorp pile to recover recyclable lead materials
- Dig up wastes from the SLLR pile, Venice alleys, and Eagle Park Acres, and place them in liner
- Dig up soils from area closest to the NL/Taracorp site (Area 1) with lead levels greater than 1000 ppm and soils in residential areas (Areas 2 through 8) with lead levels greater than 500 ppm, and place in the liner system
- Cover dug-up areas with asphalt or sod
- Install wells to test ground-water quality
- Test air and ground water quality
- Restrict site access and use

The waste materials from the Taracorp pile would be processed to recover plastic battery case material and usable lead. The recovered materials would be taken off site for recycling. Materials not sent off site for recycling would be placed in the liner. The amount of digging and handling of wastes would increase the potential exposure of workmen and the community to contaminated dust. Dust control measures would be required.

Total Cost: $45,000,000
Implementation Time: 5-6 years

Alternative G

- Take the drums of lead waste away from the Taracorp pile to recover lead materials that can be recycled
- Dig up the Taracorp pile and process the wastes from the pile to recover recyclable lead and battery case materials
- Take recyclable material from the Taracorp pile off site for recovery
- Take the rest of the Taracorp pile wastes to an EPA-approved hazardous waste landfill
- Dig up battery case materials from the SLLR pile, Venice alleys and Eagle Park Acres; take to an EPA-approved hazardous waste landfill
- Dig up contaminated soils from one area next to the site (Area 1) and transport to an EPA-approved hazardous waste landfill
- Dig up contaminated soils from residential areas (Areas 2 through 8); take off site for disposal at an EPA-approved solid waste landfill
- Restore excavated areas with sod or asphalt
- Install wells to test ground-water quality
- Test air and ground-water quality
- Restrict site access and use

This is the most costly alternative considered for the site. This alternative would reduce the amount of wastes in the community more than the other alternatives by taking them off site. The handling and digging up of hazardous waste could pose a short-term threat to on-site workers, the community, and the environment. Dust control measures would be required.

Total Cost: $67,000,000
Implementation Time: 5-6 years

U.S. EPA's Preferred Alternative (Alternative H)

U.S. EPA believes that the human health and environmental risks from the site are best addressed by this alternative. This alternative, called Alternative H, would prevent any more contact with contaminated soils and dust. If this alternative is used to clean up the NL/Taracorp site, the following things would be done:

- Take the drums of lead waste away from the Taracorp pile to recover lead materials that can be recycled
- Dig up wastes from the SLLR pile, Venice alleys, and Eagle Park Acres, and place the wastes with the Taracorp pile
- Dig up soils from Area 1 with lead levels greater than 1000 ppm and soils in the residential areas (Areas 2 through 8) with lead levels greater than 500 ppm, and place the soils with the Taracorp pile
- Cover the dug-up areas with sod or asphalt
- Place a multilayered hazardous waste cap on the consolidated Taracorp pile
- Install wells to test ground-water quality
- Test air and ground-water quality
- Restrict site access and use

U.S. EPA believes that this alternative would protect human health and the environment, comply with all pertinent laws and regulations, would be a long-term solution, reduce the movement of lead in the environment, and would be cost effective. The amount of digging required could expose the community to contaminated dust. Dust control measures would be required.

Total Cost: $25,000,000
Implementation Time: 1.5 to 2.5 years

The Next Step

U.S. EPA will consider public comments received during the public comment period before choosing a final remedy for the site. The final remedy will be described in what is called a Record of Decision (ROD).

After a final cleanup solution is chosen U.S. EPA will meet with NL Industries and other companies involved to ask them to plan and pay for the actual site cleanup. Following negotiations, the final remedy will be designed and implemented.

HOW U.S. EPA CHOOSES A CLEANUP SOLUTION

U.S. EPA uses nine factors, or criteria, to evaluate possible cleanup solutions for Superfund sites. The solution chosen to clean up the site must meet all nine criteria. The nine criteria are presented below as a series of questions.

Will it reduce the threat posed by the site? (Protectiveness)

U.S. EPA evaluates potential cleanup solutions to determine if they protect public health and the environment from the threat posed by the site. The remedy finally chosen must reduce, eliminate, or control any health or environmental threat. The threat posed by the NL/Taracorp site is through direct contact with contaminated materials or breathing of contaminated dust. U.S. EPA's preferred alternative eliminates the threat by digging up the contaminated materials and covering them with an EPA-approved hazardous waste cap.

Does the method comply with related environmental laws and regulations?

U.S. EPA evaluates the cleanup options to make sure they meet related federal, state, and local regulations.

How long with the cleanup action effectively protect the community? (Long-term effectiveness)

U.S. EPA considers how permanently a potential cleanup action addresses health and environmental threats. The action finally chosen must be either permanent or reliable for many years after it has been put into place. U.S. EPA's preferred alternative for the NL/Taracorp site would provide good long-term effectiveness against direct contact with waste materials and breathing of contaminated dust.

How well does the cleanup action solve the contamination problem?

U.S. EPA evaluates how effectively a potential remedy addresses the contamination problem. The cleanup action chosen must decrease the toxicity, movement, or amount of hazardous materials present. U.S. EPA's preferred alternative for the NL/Taracorp site would slightly reduce the amount of hazardous materials present because the drums of lead processing wastes would be removed and recycled off site. Digging up and covering the wastes with a hazardous waste cap would reduce the movement of the hazardous materials into the environment.

How quickly will the threat be eliminated and how will the cleanup affect the community? (Short-term effectiveness)

Cleanup technologies often take several years to put in place. During those years, the health or environmental threat may still exist. In addition, some cleanup activities may themselves create short-term health or environmental risks. U.S. EPA evaluates the length of time required to put the remedy into place, and the possible effect on the community. U.S. EPA's preferred alternative would take from 1½ to 2½ years to put in place. This is longer than for less protective alternatives, but much shorter than for some other alternatives. The digging activities could create a dust problem and potentially expose the community to contaminated dust. Therefore, dust control measures, such as wetting down the dust, would be used.

Can the remedy be carried out? (This is called implementability)

U.S. EPA looks at the potential cleanup remedies to determine if the needed materials and services are readily available. If not, the remedy may not be practical for the site. U.S. EPA's preferred alternative for the NL/Taracorp site would use standard techniques and could be easily implemented.

How much will it cost?

U.S. EPA considers the costs associated with each potential remedy. Both short and long-term costs are calculated. The cost of U.S. EPA's preferred alternative would be higher than three alternatives and lower than three alternatives.

What does the State of Illinois think about U.S. EPA's choice? (State acceptance)

Before making a final decision, U.S. EPA asks the State to comment on the Proposed Plan. Frequently, the state is involved from the start in the environmental studies leading to U.S. EPA's choice. In Illinois, the state agency is IEPA. IEPA supports U.S. EPA's preferred alternative.

How does the community view U.S. EPA's choice? (Community Acceptance)

After evaluating the possible cleanup methods, U.S. EPA presents its choice, called the Proposed Plan. After the plan is released, community members may give written or oral comments to U.S. EPA during a formal public comment period. Before making a final decision, U.S. EPA must consider all public comments and respond to them. U.S. EPA believes that the community's comments are important and often bring up issues which have an impact on the cleanup remedy finally selected. Community acceptance of the preferred alternative will be evaluated after the public comment period.

MAILING LIST

If you did not receive this fact sheet in the mail or your name was not on it, you are not on our mailing list. If you wish to be placed on the NL/Taracorp mailing list, please fill out this form and send it to:

MaryAnn Croce LaFaire (5PA-14)
Office of Public Affairs
U.S. EPA Region 5
230 South Dearborn Street
Chicago, Illinois 60604

Name _____

Address _____

City _____

State _____

Zip _____ Phone _____

Affiliation _____

TO CONTACT U.S. EPA OFFICIALS ...

If you would like to speak to a U.S. EPA official about this fact sheet or anything related to the NL/Taracorp site, please contact:

MaryAnn Croce LaFaire
Community Relations Coordinator
Office of Public Affairs
(312) 886-1728

Brad Bradley
Remedial Project Manager
Office of Superfund
(312) 886-4742

U.S. EPA Region 5
230 South Dearborn Street
Chicago, Illinois 60604

TOLL-FREE PHONE NUMBER:
1-800-572-2515
9 a.m. to 4 p.m.
Central Time

WHERE TO FIND SITE DOCUMENTS

Information about the site and the Superfund program is available in an information repository located at the Granite City Public Library. The remedial investigation and feasibility study reports and addenda, NL/Taracorp site fact sheets, and Proposed Plan are among the documents available for review in the repository. You are encouraged to read these materials for more information about the activities described in this fact sheet.

For more information contact:

Robert Stack
Granite City Public Library
2001 Delmar Avenue
Granite City, IL 62040

U.S. EPA Region 5
230 South Dearborn Street
Chicago, Illinois 60604